|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  |  |  |  |  | **SIT-A Quality Score, unc, RMS** | | |
| **GV#** | **GV name** | **Best resolution to use** | **unc** | **Units for unc** | QI Score | Mean error | RMSE |
| 1 | **AAOD\_l\_UV\_column** | **50kmH/500mV** | SSA: ±0.04 | - | 0.724 | 0.030 | 0.100 |
| 2 | **AAOD\_l\_UV\_PBL** | SSA: ±0.04 | - |  |  |  |
| 3 | **AAOD\_l\_VIS\_column** | SSA: ±0.04 | - |  |  |  |
| 4 | **AAOD\_l\_VIS\_PBL** | SSA: ±0.04 | - |  |  |  |
| 5 | **AAOD\_l\_UV\_column** | SSA: ±0.02 | - |  |  |  |
| 6 | **AAOD\_l\_UV\_PBL** | SSA: ±0.02 | - |  |  |  |
| 7 | **AAOD\_l\_VIS\_column** | SSA: ±0.02 | - |  |  |  |
| 8 | **AAOD\_l\_VIS\_PBL** | SSA: ±0.02 | - |  |  |  |
| 9 | **ASYM\_UV** | 05kmH/500mV if available | ±0.02 | - |  |  |  |
| 10 | **ASYM\_VIS** | ±0.02 | - |  |  |  |
| 11 | **AEFR\_l\_column** | **50kmH/500mV** | 0.1 m or 10% | m |  |  |  |
| 12 | **AEFR\_l\_PBL** | 0.1 m or 10% | m |  |  |  |
| 13 | **AE2BR\_l\_UV\_column** | **50kmH/500mV** | ±25% | sr |  |  |  |
| 14 | **AE2BR\_l\_UV\_PBL** | ±25% | sr |  |  |  |
| 15 | **AE2BR\_l\_VIS\_column** | ±25% | sr |  |  |  |
| 16 | **AE2BR\_l\_VIS\_PBL** | ±25% | sr |  |  |  |
| ~~17~~ | **~~AE2BR\_l\_NIR\_column~~** |  | ±25% | sr |  |  |  |
| ~~18~~ | **~~AE2BR\_l\_NIR\_PBL~~** |  | ±25% | sr |  |  |  |
| ~~19~~ | **~~AODF\_l\_UV\_column~~** |  | ±0.02±0.05\*AOT | - |  |  |  |
| ~~20~~ | **~~AODF\_l\_UV\_PBL~~** |  | ±0.02±0.05\*AOT | - |  |  |  |
| 21 | **AODF\_l\_VIS\_column** | **50kmH/500mV** (broken down Min/Enh in SATM, but unlikely to receive 25kmH) | ±0.02±0.05\*AOT | - |  |  |  |
| 22 | **AODF\_l\_VIS\_PBL** | ±0.02±0.05\*AOT | - |  |  |  |
| ~~23~~ | **~~AODF\_l\_NIR\_column~~** |  | ±0.02±0.05\*AOT | - |  |  |  |
| ~~24~~ | **~~AODF\_l\_NIR\_PBL~~** |  | ±0.02±0.05\*AOT | - |  |  |  |
| ~~25~~ | **~~ANSPH\_l\_UV\_column~~** |  | ±10% | - |  |  |  |
| ~~26~~ | **~~ANSPH\_l\_UV\_PBL~~** |  | ±10% | - |  |  |  |
| 27 | **ANSPH\_l\_VIS\_column** | **50kmH/500mV** (broken down Min/Enh in SATM, but unlikely to receive 25kmH) | ±10% | - |  |  |  |
| 28 | **ANSPH\_l\_VIS\_PBL** | ±10% | - |  |  |  |
| ~~29~~ | **~~ANSPH\_l\_NIR\_column~~** |  | ±10% | - |  |  |  |
| ~~30~~ | **~~ANSPH\_l\_NIR\_PBL~~** |  | ±10% | - |  |  |  |
| 31 | **AOD\_l\_UV\_column** | 05kmH/500mV if available | ±0.02±0.05\*AOT | - |  |  |  |
| 32 | **AOD\_l\_UV\_PBL** | ±0.02±0.05\*AOT | - |  |  |  |
| 33 | **AOD\_l\_VIS\_column** | ±0.02±0.05\*AOT | - |  |  |  |
| 34 | **AOD\_l\_VIS\_PBL** | ±0.02±0.05\*AOT | - |  |  |  |
| 35 | **AOD\_l\_NIR\_column** | ±0.02±0.05\*AOT | - |  |  |  |
| 36 | **AOD\_l\_NIR\_PBL** | ±0.02±0.05\*AOT | - |  |  |  |
| 37 | **APM25** | 05kmH/500mV if available | ±50% | g/m3 |  |  |  |
| 38 | **ARIR\_l\_column** | **50kmH/500mV** (broken down Min/Enh in SATM, but unlikely to receive 25kmH) | ±0.025 | - |  |  |  |
| 39 | **ARIR\_l\_PBL** | ±0.025 | - |  |  |  |
| 40 | **AIIR\_l\_column** | ±0.002 | - |  |  |  |
| 41 | **AIIR\_l\_PBL** | ±0.002 | - |  |  |  |
| 42 | **AABS\_z\_UV\_profile\_above\_PBL** | **50kmH/500mV** | SSA: ±0.03 | - |  |  |  |
| 43 | **AABS\_z\_UV\_profile\_in\_PBL** | SSA: ±0.03 | - |  |  |  |
| 44 | **AABS\_z\_VIS\_profile\_above\_PBL** | SSA: ±0.03 | - |  |  |  |
| 45 | **AABS\_z\_VIS\_profile\_in\_PBL** | SSA: ±0.03 | - |  |  |  |
| 46 | **AEFR\_z\_profile\_above\_PBL** | **50kmH/500mV** | 20% for ext>50 Mm-1 | m |  |  |  |
| 47 | **AEFR\_z\_profile\_in\_PBL** | 20% for ext>50 Mm-1 | m |  |  |  |
| 48 | **AEXT\_z\_UV\_profile\_above\_PBL** | **05kmH/30mV (minimum)**  **01kmH/30mV (enhanced)** | Max of (20 Mm-1, ±20%) | Mm-1 |  |  |  |
| 49 | **AEXT\_z\_UV\_profile\_in\_PBL** | Max of (20 Mm-1, ±20%) | Mm-1 |  |  |  |
| 50 | **AEXT\_z\_VIS\_profile\_above\_PBL** | Max of (20 Mm-1, ±20%) | Mm-1 |  |  |  |
| 51 | **AEXT\_z\_VIS\_profile\_in\_PBL** | Max of (20 Mm-1, ±20%) | Mm-1 |  |  |  |
| 52 | **AEXT\_z\_NIR\_profile\_above\_PBL** | Max of (20 Mm-1, ±20%) | Mm-1 |  |  |  |
| 53 | **AEXT\_z\_NIR\_profile\_in\_PBL** | Max of (20 Mm-1, ±20%) | Mm-1 |  |  |  |
| 54 | **AE2BR\_z\_UV\_profile\_above\_PBL** | **50kmH/500mV** | ±25% | sr |  |  |  |
| 55 | **AE2BR\_z\_UV\_profile\_in\_PBL** | ±25% | sr |  |  |  |
| 56 | **AE2BR\_z\_VIS\_profile\_above\_PBL** | ±25% | sr |  |  |  |
| 57 | **AE2BR\_z\_VIS\_profile\_in\_PBL** | ±25% | sr |  |  |  |
| ~~58~~ | **~~AE2BR\_z\_NIR\_profile\_above\_PBL~~** |  | ±25% | sr |  |  |  |
| ~~59~~ | **~~AE2BR\_z\_NIR\_profile\_in\_PBL~~** |  | ±25% | sr |  |  |  |
| ~~60~~ | **~~AEXTF\_z\_UV\_profile\_above\_PBL~~** |  | Max of (20 Mm-1, ±20%) | Mm-1 |  |  |  |
| ~~61~~ | **~~AEXTF\_z\_UV\_profile\_in\_PBL~~** |  | Max of (20 Mm-1, ±20%) | Mm-1 |  |  |  |
| 62 | **AEXTF\_z\_VIS\_profile\_above\_PBL** | **50kmH/500mV** | Max of (20 Mm-1, ±20%) | Mm-1 |  |  |  |
| 63 | **AEXTF\_z\_VIS\_profile\_in\_PBL** | Max of (20 Mm-1, ±20%) | Mm-1 |  |  |  |
| ~~64~~ | **~~AEXTF\_z\_NIR\_profile\_above\_PBL~~** |  | Max of (20 Mm-1, ±20%) | Mm-1 |  |  |  |
| ~~65~~ | **~~AEXTF\_z\_NIR\_profile\_in\_PBL~~** |  | Max of (20 Mm-1, ±20%) | Mm-1 |  |  |  |
| ~~66~~ | **~~ANSPH\_z\_UV\_profile\_above\_PBL~~** |  | ±10% | - |  |  |  |
| ~~67~~ | **~~ANSPH\_z\_UV\_profile\_in\_PBL~~** |  | ±10% | - |  |  |  |
| 68 | **ANSPH\_z\_VIS\_profile\_above\_PBL** | **50kmH/500mV** | ±10% | - |  |  |  |
| 69 | **ANSPH\_z\_VIS\_profile\_in\_PBL** | ±10% | - |  |  |  |
| ~~70~~ | **~~ANSPH\_z\_NIR\_profile\_above\_PBL~~** |  | ±10% | - |  |  |  |
| ~~71~~ | **~~ANSPH\_z\_NIR\_profile\_in\_PBL~~** |  | ±10% | - |  |  |  |
| 72 | **ANC\_z\_profile\_above\_PBL** | **50kmH/500mV** | ±50% | cm-3 |  |  |  |
| 73 | **ANC\_z\_profile\_in\_PBL** | ±50% | cm-3 |  |  |  |